

New Jersey Department of Environmental Protection



Capacity Assurance Program

NJPDES

Treatment Works Approval Program

N.J.A.C. 7:14A-22 and 23

October 2014

Existing Capacity Assurance Program N.J.A.C. 7:14A-22.16

- CAP is infrastructure and permit limit driven: designed to ensure permit limits are met and tied to sewer bans
- Whenever the "committed flow" reaches or exceeds 80%
 percent of the permitted capacity of a treatment works, the
 participating municipalities and/or sewerage authorities shall
 submit to the Department a program to be implemented in
 order to prevent an overloading of their facility or a violation
 of their NJPDES permit.
- "Committed Flow" = actual flow (3 most recent consecutive month average flow) + the sum of all flows anticipated from approved, but not yet operational connections to the plan, as defined at NJAC 7:14A-1.2.

Existing Capacity Assurance Program Requirements N.J.A.C. 7:14A-22.16

- The Program shall include:
 - 1. Water conservation measures
 - 2.Infiltration/Inflow reduction
 - 3. Maximize flow to WWTP
 - 4.Construction Improvements
 - 5.Disconnect roof leaders, sump pump for inflow reduction
 - 6.Quarterly Reports (WQM007)
 - 7.Self Imposed Sewer Connection Ban, if you expect to violate the NJPDES permit

Program Analysis

- Existing flow data for 189 wastewater treatment plants under various flow scenarios:
 - Several timeframes: 5 years, 3 years, 1 year...
 - Several flows: max 3 month or 12 month rolling averages, average 3 month or 12 month rolling, etc.)
- Compliance data in relation to % of permitted flow
 - Result: no strong positive correlation between % and noncompliance for several parameters (BOD, CBOD, TSS)
- Number of TWAs issued in past year as a potential indicator of growth

Program Analysis Results

- Two programs (TWA and WQMP) have different objectives
- Flow statistics and associated time periods should be considered in light of those objectives
- TWA: 100% permitted capacity vs. committed flow = existing flow (most recent 3 months) + approved
- Planning:
 - Build-out (20 year for urban areas) vs. permitted capacity
 - 80% of permitted capacity vs. highest 12 month rolling average over 5 years

Proposed Changes

- TWA: No change in the consistency assessment for issuance a Treatment Works Approval (w/in approved SSA).
- Title: Capacity <u>Assurance</u> revised to Capacity <u>Analysis</u> Program
- Increasing requirement of committed flow of POTW from 80 to 100% of permitted capacity.
- <u>Certification</u>(s) will be required by the <u>permittee</u> that the program submitted will implemented
- Department review and approval of the CAP program is not required.
- Department shall monitor CAP program for compliance.

Capacity Analysis Program

New sub-section...to allow 'exit' if:

- Committed flow has NOT, over a period of 3 years, reached 100% of the permitted capacity of the treatment works; and
- the facility has implemented measures to reduce flow (as identified in the 'program'); and
- the facility had no serious violations (as defined at N.J.A.C. 7:14A-1.2) over that period, then
- the facility may request authorization by the Department to be reduce monthly reporting

Results

- Planning rule looks at build out vs. permitted capacity and 80% of permitted capacity vs. highest 12 months average over 5 year period.
- TWA/Infrastructure rule looks at most recent 3 months; requires detailed analysis when flows reach 100% of permitted capacity
- Concurrent Rule Proposal: December 2014/January 2015

QUESTIONS?